

First Announcement

International Workshop

On

Smart Sensors and Microsystems for environment monitoring and Fire Prevention

University of Toulouse, France

May 20th-22nd, 2026

<https://senforfire.sciencesconf.org/>



This workshop addresses the use of **smart sensor networks** and **data-driven** approaches for enhancing **wildfire risk** assessment and early detection systems. It is organized into three parts.

Part I explores wildfire danger and risk mapping, examining the limitations of current models in Mediterranean landscapes, the challenges of scale mismatches between satellite and ground data, and the complexities of municipal-level risk assessment for governance and community preparedness.

Part II focuses on **smart systems for wildfire forecasting**, including data-driven risk mapping, **optimal sensor network** design, and early warning models, with lessons drawn from real-world IoT deployments.

Part III highlights **environmental sensing technologies** for high-resolution monitoring and fire detection, covering measurements of weather, soil properties, and fire-related emissions such as infrared signals, gases, volatile organic compounds, and particulate matter.

The workshop combines theoretical insights and practical applications to demonstrate how advanced sensor networks can improve situational awareness, inform decision-making, and strengthen wildfire prevention and response strategies.

Main Topics :

- ✓ Smart systems for wildfire risk forecasting (Data-driven wildfire risk mapping and optimal sensor network design) ; lessons from real world deployments
- ✓ State of art on wildfire danger and risk through models (from space to ground: Scale mismatches and data limitations in operational wildfire risk assessment)
- ✓ Trends on miniaturized sensors (humidity, gas, temperature, wind, meteorological,...) for environment monitoring and fire detection ; Intelligent data treatment from these sensors to index indicators

Key Dates:

- **February 16th, 2026:** Opening call for abstracts and announcement of confirmed invited speakers and scientific committee
- **April 20th, 2026:** Deadline for abstract submission
- **May 4th, 2026:** Closing registrations

CMC2 PhD Prize
Award